

BOOK REVIEW

INTERDISCIPLINARY FINITE ELEMENT ANALYSIS, (Ed. John F. Abel, Takahiko Kawai and Shan-Fu Shen), Cornell University, Ithaca, N.Y. 14853.

The Proceedings of the U.S.-Japan Seminar on Interdisciplinary Finite Element Analysis conducted at Cornell University in August 1978 consists of 43 papers covering a wide range of topics and interests. The 834 page volume is divided into four general topic areas entitled: Basic Theory, Formulative Methods and General Techniques; Flow Problems; Interdisciplinary Analysis and; Numerical Analysis, Computer Program Technology and Computer Graphics. Each part contains ten or eleven papers.

The cloth bound book is produced from camera ready copy and is moderately priced at \$33-00, including surface-mail postage. Owing to the production method employed, the editors have not attempted to enforce a uniform notation or approach to the subject matter. While this may be a distraction to some, most readers will find the many diverse subjects considered in the book to be too broad for general assimilation. Specialists in some areas, especially fluid mechanics, electrical and electromagnetic fields and transient analysis undoubtedly will find the proceedings quite useful for their research. In

addition, general practitioners of the finite element method can benefit greatly from a review of the various approaches advocated in the utilization of the finite element method to solve complex problems. Problem areas addressed include: hydrodynamics, fluid flow, shallow water waves, thermal analysis with phase changes, fracture analysis, welding simulation, identification of material properties, fusion analysis, electrical field analysis, electromagnetics, graphical presentation of results, finite element computer software design, among other areas.

Several of the papers conclude with some of the informal discussion of the conference. In some papers the discussion provides valuable insights to the subject matter of the presentation.

The last few papers in the proceedings are devoted to finite element software and use of graphical presentation of results. Developers and users of computer software will find valuable information for various uses of interactive computing and graphics for finite element simulations.

R. L. TAYLOR
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ANNOUNCEMENTS

FIFTH GAMM CONFERENCE ON NUMERICAL METHODS IN FLUID MECHANICS

to be held at the Università di Roma, Italy, 5-7 October 1983

The Gamm Committee for Numerical Methods in Fluid Mechanics announces its fifth Conference organized in cooperation with the Università di Roma and the Consiglio Nazionale delle Ricerche, Italy.

The Conference, which will be held at the 'Facoltà di Ingegneria, Università di Roma', will be concerned with the theory and the application of numerical methods in fluid mechanics. The emphasis will be on the development of novelties in methods.

Deadline for abstracts (one page, two pages at maximum) is 15 March 1983. The proceedings of the conference will be published by the Vieweg Verlag in the series *Notes on Numerical Fluid Mechanics*.

Further information and registration forms can be obtained from the first of the Chairmen

of the Conference:

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